

Appl. No. 09/657,685
Amdt. Dated March 23, 2004
Reply to Office action of December 23, 2003
Attorney Docket No. P12227-US2
EUS/J/P/04-3064

REMARKS/ARGUMENTS

Amendments

The Applicants have amended claims 1-3, 6-8 and 11-13. Claims 1-15 are pending in the application. Favorable reconsideration of the application is respectfully requested in view of the foregoing amendments and the following remarks.

Claim Rejections – 35 U.S.C. § 102(b)

Claims 1, 6, and 11 are rejected under 35 U.S.C. 102(b) as being anticipated by Darland *et al.* (US 5,793,771 hereinafter Darland). The Applicants respectfully traverse the rejection of these claims.

The Applicants' invention discloses a method, apparatus and system for permitting interaction of different networks, specifically second generation (2G) and third generation (3G) networks. A GPRS tunneling protocol (GTP) splitter is utilized in a 3G-Gateway server node (3G-GSN) to split an incoming 2G signal into control data and user data (GTP-C and GTP-U). In the third generation network, a node separate from the node handling the user data handles control data. The control data is forwarded to the 3G-GSN server for resource handling and the user data is processed in the 3G-GSN. In the reverse, the 3G-GSN server sends GTP-C messages to the 3G-GSN gateway. The gateway converts the GTP-C messages to GTP and forwards the messages to the 2G-GSN node. The user traffic is processed in the 3G-GSN in both directions.

The Darland reference appears to disclose a system and method for protocol translation. In particular, Darland discloses converting SS7 protocol to a different protocol, both inbound and outbound. Simply put, for inbound service, the MTP and SCCP are stripped from an SS7 query and the transaction portion of the TCAP is decoded. After decoding (parsing) the component portion of the TCAP is passed to an inbound subsystem module. In order for the query to be routed to the second network properly, the TCAP parameters are translated into the required format and attached to the query. The non-SS7 protocol packet is formatted and delivered to a Network

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Interface Module and the module routes the message to the non-SS7 network. (Col. 2, line 51 to Col 3, line 3).

In contrast to the Darland reference, the present invention, as claimed in amended claim 1, receives an incoming message and removes the control data from the message for forwarding to the 3G-GSN server. The user data is processed in the 3G-GSN gateway. Darland, in contrast strips off and replaces the MTP and SCCP with translated parameters. The message with control data and user data is processed in the same node in the Darland reference and in two nodes in the Applicants' invention. The Applicants respectfully submit that Darland does not disclose (directly or inherently) the above limitation in claim 1 of splitting an incoming signal into a control part and a user part.

As between claim 1 and the Darland reference, the Applicants submit that independent claims 6 and 11 contain limitations analogous to those found in claim 1. The Applicants respectfully request that the rejection of claims 1, 6 and 11 be withdrawn.

Claim Rejections – 35 U.S.C. § 103 (a)

Claims 2, 3, 7, 8, 12 and 13 are rejected under 35 U.S.C § 103(a) as being unpatentable over Darland in view of Lehtimaki et al. (US Pub. 2002/0085512, hereinafter Lehtimaki). The Applicants respectfully traverse the rejection of these claims.

Amended claim 2 of the Applicants' invention recites that if the received communication does not contain control data, the third node processes the communication. The third node is a 3G-GSN gateway node (Figure 5B) which acts as a 2G-SGSN for traffic from a 3G-SGSN gateway to a 2G-SGSN. (Page 7, lines 14-15). This step is neither taught nor suggested by Darland or Lehtimaki.

The Lehtimaki reference is cited for processing a communication that does not contain control data. Applicants have reviewed the cited figure and find no reference to the processing non-control data in the second node. Figure 3 and the accompanying description describe transmissions between a mobile station and the RAN (user data is

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routed directly from the RAN to the GW), between the SMSC and the GW (control information is supplied to the GW from the SMSC) and between the RAN and the GW (separate inband control signaling and a required data resource is required for the 3G RAN).

Regarding claim 3, Lehtimaki is cited as teaching the steps of extracting and forwarding in the second node. In the Official Action, a correspondence is drawn between this feature claimed in amended claim 3 and the description of user data flow from a mobile station and a Radio Access Network (RAN) in Lehtimaki. Applicants have reviewed this cited portion of the Lehtimaki Detailed Description and find no reference to extracting and forwarding control data. Instead, the cited portion discusses a second control example in which there is no control plane provided between the 3G RAN and GW nodes. This requires that a dedicated resource be utilized, in contrast to the present invention where the third node (3G-GSN gateway) processes and sends the message to the 2G network.

Claims 7-8 and 12-13 contain analogous limitations to the limitations in claims 2 and 3. As noted above, claims 1, 6 and 11 and the respective dependent claims contain limitations not found in either Darland or Lehtimaki. For all of the above reasons, Darland and Lehtimaki, taken singly or in combination, fail to teach or suggest all of the subject matter of claims 2, 3, 7, 8, 12 and 13 as required by 35 U.S.C. §103(a). The Applicants respectfully request the withdrawal of the rejection of these claims.

Claims 4, 5, 9, 10, 14 and 15 are rejected under 35 U.S.C § 103(a) as being unpatentable over Darland in view of Palat *et al.* (EP 1079655 A1, hereinafter Palat). The Applicants respectfully traverse the rejection of these claims.

It is respectfully submitted that the Palat reference does not address the above-identified deficiencies of Darland with respect to Applicants' invention. The combination of the Darland and Palat references fails to teach splitting an incoming 2G signal into control data and user data (GTP-C and GTP-U) and processing the control data at the second node and processing the user data at the third node.

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Claims 4, 5, 9, 10, 14 and 15 contain the same limitations as the respective independent claims. For all of the above reasons, Darland and Palat taken singly or in combination, fail to teach or suggest all of the subject matter of claims 4, 5, 9, 10, 14 and 15 as required by 35 U.S.C. §103(a). The Applicants respectfully request the withdrawal of the rejection of these claims.

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CONCLUSION

In view of the foregoing remarks, the Applicants believe all of the claims currently pending in the Application to be in a condition for allowance. The Applicant, therefore, respectfully requests that the Examiner withdraw all rejections and issue a Notice of Allowance for Claims 1-15.

The Applicants request a telephonic interview if the Examiner has any questions or requires any additional information that would further or expedite the prosecution of the Application.

Respectfully submitted,



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